

BUDGET JUSTIFICATION PAGE MODULAR RESEARCH GRANT APPLICATION				
Initial Budget Period	Second Year of Support	Third Year of Support	Fourth Year of Support	Fifth Year of Support
\$ 81,341	\$	\$	\$	\$
Total Direct Costs Requested for Entire Project Period			\$ 81,341	

Personnel

Sandy Smith, Ph.D., Principal Investigator, (30% effort) will supervise and coordinate all aspects of this project. She will specifically be involved in optic system design, modeling and simulation of sensor performance and data analysis. Having expertise in biomedical instrumentation and electromagnetics/optics makes her ideally suited to head this project.

Alan Jones, Ph.D., Co-investigator, (25% effort) will be responsible for the feasibility determinations, design of the hardware and development of the instrumentation.

Jonathan Goodlatch, BSEE, (19% effort) will serve as a Project Engineer. Mr. Goodlatch will implement the algorithm design and implementation.

To be Appointed Technician, (25% effort) is responsible for the repair and maintenance of the equipment and will run a variety of system tests.

Consortium**Consortium Costs. \$15,942** Total Costs for Entire Period

Sean Williams, M.D., (5% effort) Assistant Professor of Engineering, and Engineering Director of the Marshall University Foot Laboratory, Iowa will be responsible for measuring stress responses during repeated foot extensions.

Marshall University, School of Medicine

Direct Cost	\$11,846
F&A Costs	<u>\$ 4,096</u>
Total Costs	\$15,942

Contractual Costs. Approximately **\$8,000** Total Costs for Entire Period.

Vienna Clinic Foundation (VCF) {X} Domestic { } Foreign

The Vienna Clinic Foundation (Vienna, Pennsylvania) will be subcontracted to test and evaluate the arch stress sensor array necessary for clinical studies. Roger Davis, M.D., (10% effort) has agreed to perform under subcontract. He will evaluate testing of arch stress in a clinical environment using equipment at the VCF.

Consultant Costs

George Poole, Ph.D., (5% effort) will serve as a paid clinical consultant. Dr. Poole will aide ABC Company in ensuring that the XYZ system specifications are consistent with the needs of the clinical community. Dr. Poole will also be involved in evaluating the results of the Phase I studies. He will be available for three days at \$300/day **(\$900 total)**.

Margaret Trimble, Ph.D., (10% effort) will serve as a paid consultant. She will specifically advise us in tissue preparation and data analysis. She will be available for 10 days at \$200/day (**\$2000 total**).

Sum of Consortium/Contractual and Consultant Costs: \$26,842 Total Costs for entire period.

Fee (SBIR/STTR Only)

A fee of 4% of total costs (direct and indirect) is requested. This fee contributes to the growth of the small business concern by allowing expansion of resources and personnel development. The fee is consistent with a normal profit margin provided for research and development work.